Economic Development: Kentucky's future economy and congestion concerns: The economic development and highway congestion in Kentucky is very much a "relative" issue. While Kentucky does not have the overly-oppressive highway congestion found in many of the nation's very large cities, there are times when congestion in our urban centers is just as frustrating to Kentucky drivers. Morning and afternoon "rush hours" create traffic problems on many of our city streets, urban beltlines, and metro area interstate highway arteries. Additionally, "just in time" delivery schedules have created "rolling warehouses" on many of Kentucky's rural interstates, resulting in truck percentages of 50% in some instances. Such heavy truck volumes choke the traffic-carrying capacity of our major roadways, and create safety issues and driver frustrations. As traffic and freight volumes increase in the years ahead, our existing highway network will become more and more constrained and potentially impact Kentucky's competitiveness in the global marketplace. Thus, each of the FY 2007-2010 STIP projects, whether identified with a purpose of safety, reliability, or economic development, truly has an effect on Kentucky's future economy and congestion concerns.

2. Highway Safety Improvement Program (HSIP)

As outlined within SAFETEA-LU Sections 1401 through 1412, the term "Highway Safety Improvement Project" means a project described in the state's Strategic Highway Safety Plan that: (1) corrects or improves a hazardous road location or feature; or (2) addresses a highway safety problem. In addition, the term safety project includes a project to promote the awareness of the public and educate the public concerning highway safety matters and a project to enforce highway safety laws.

The purpose of the Highway Safety Improvement Program (HSIP) is to achieve a significant reduction in traffic fatalities and serious injuries on public roads. Each of the following areas within the HSIP will be conducted in accordance with regulations as outlined in the corresponding sections of SAFETEA-LU and Title 23.

Hazard Elimination and Safety Program (HES) – High Cost Improvements

The Hazard Elimination and Safety (HES) Program identifies corrective measures for locations with a significant collision experience, ultimately providing a greater degree of safety for the traveling public. Project improvements are typically higher cost solutions. Common projects include: adding turn lanes at intersections, improving sight distance, changing horizontal/vertical alignment, installing intersection lighting, etc.

The process steps are: (1) identification of high collision locations, (2) analysis of selected high collision locations, and (3) select locations for HES projects. However, projects must meet the following basic requirements for acceptance into the HES program:

a. A minimum number of collisions over a three year period, 5 for rural and 14 for urban locations
b. Have a Critical Rate Factor of 1.0 or greater
c. A total project cost not to exceed $1,500,000 for all phases of work
d. Have a Benefit Cost Ratio greater than 1.0
e. Proposed project addresses the pattern of collisions

Projects meeting the HES program's minimum requirements are submitted to the FHWA for review and approval into the HES program. Upon approval of the identified projects into the HES program, funding for the projects are initiated based upon statewide priorities and upon available funding.

Safety – Low Cost Improvements

Low Cost Improvements is a new program that will identify low-cost corrective measures for locations with a significant collision experience. Typically, these improvements will not involve right-of-way or utility phasing, and construction typically may be accomplished with state forces. Using before/after collision data, reduction factors will be monitored and modified to provide more accurate reduction factors and to determine which improvements provide the greatest benefits to costs.

Lane Departure Resurfacing

Lane Departure Resurfacing is a new program that will primarily address lane departure collisions on high risk rural roads. Roadway sections with a high frequency of collisions will be identified from the list of roadways scheduled to be resurfaced by the Division of Maintenance. A road safety audit is performed on selected highways prior to the resurfacing project. The review team recommends improvements or modification measures to be provided during the resurfacing contract to improve safety. The focus of these efforts will be on "lane departure" collisions. Using before/after collision data, reduction factors will be monitored and modified to provide more accurate reduction factors and to determine which improvements provide the greatest benefits to costs.

Roadway Section Improvements

Roadway Section Improvements is a new program that will identify corrective measures for locations with a significant collision experience. The program will focus on locations with a significant pattern of "lane departure" collisions. Both proven measures (strategies that have been implemented with a defined crash reduction factor) and pilot measures (strategies with no proven history but a good probability of being effective) will be utilized. Pilot measures will be implemented on a limited basis. Those measures proving to be effective in reducing collisions will advance to the proven category and may be used on statewide projects. Those not proving to be effective would be phased out accordingly. Using before/after collision data, reduction factors will be monitored and modified to provide more accurate reduction factors and to determine which improvements provide the greatest benefits to costs.

Safety Corridors

This program involves the selection of safety corridors for each district following criteria developed by the Kentucky Transportation Center. Improvement areas and potential corrective measures are identified along the corridor. In general, low cost improvements will be recommended. Consideration will be given to all types of collisions in this emphasis area with an emphasis on fatal and injury collisions. Using before/after collision data, reduction factors will be monitored and modified to provide more accurate reduction factors and to determine which improvements provide the greatest benefits to costs.

Driver Education/Drive Smart/Area Development Districts Program

This program involves the Cabinet's efforts in the behavioral component of highway safety through educational and outreach programs.

Safe Routes to School Program

This program is a set-aside provision of SAFETEA-LU Section 1404, to improve the safety of students in grades K-8 who walk or bicycle to school and to encourage more children to walk and bicycle to school. This program is intended to make walking and bicycling to school safe and more appealing, will facilitate the planning, development and implementation of projects that will improve safety, and will reduce traffic, fuel consumption, and air pollution in the vicinity of schools. Common infrastructure projects will include: sidewalk improvements, traffic calming and speed reduction improvements, pedestrian and bicycle crossing improvements, on-street bicycle facilities, off-street bicycle and pedestrian facilities, secure bike parking, and traffic diversion improvements in the vicinity of schools. Funds will also be allocated for non-infrastructure related activities to encourage walking and bicycling to school. Common activities include: public awareness campaigns, outreach to press and community leaders, traffic education and enforcement in the vicinity of schools, student sessions on bicycle and pedestrian safety, training, etc.

Applications for consideration of funds from the Safe Routes to School Program are accepted February 1 through March 31 and project announcements are made by the end of June. The 2006 Safe Routes to School Projects are listed in Appendix A, Exhibit A-6.

Older Driver

This program is a set-aside of SAFETEA-LU Section 1405, to provide low-cost transportation enhancements to improve the safety for older drivers on our highways. The most common enhancements will be traffic signs (including improved font and letter size, diagrammatic signs, etc.) and pavement markings to improve recognition of roadway geometry.

High Risk Rural Roads

This program is a set-aside provision of SAFETEA-LU Section 1401, which addresses the need to reduce fatalities on our rural roads. No specific guidance has been established for this program as high risk rural roads will likely be addressed through other safety programs (such as Lane Departure and Roadway Section Improvements) that primarily focus on the safety of motorists on our most dangerous rural roads.

Circuit Rider

The safety circuit rider program is an effort to focus on technical support, training, and other activities that will reduce fatalities and injuries on locally managed roadways and state highways classified as minor collectors. Using crash, injury, and seat belt usage data, various counties are selected for concentrated assistance. The four focus areas of this program include: roadway departure, pedestrian crashes, intersection crashes, and improving accuracy of local road crash reports.

Work Zone Safety

This program is a set-aside provision of SAFETEA-LU Section 1409, which will provide improved safety training for temporary traffic control in work zones.

Median Guardrail/Cable

This program will involve the installation of pilot projects of cable median barrier to address locations with a pattern of severe crashes involving crossover collisions on unprotected, traversable, depressed medians.

3. Intelligent Transportation System (ITS)

The KYTC has a variety of Intelligent Transportation System (ITS) programs underway throughout Kentucky. The freeway traffic management systems in Northern Kentucky (ARTIMIS) and Metro Louisville (TRIMARC) are in operational mode. Both programs have been expanded to provide additional coverage of the freeway system and/or additional staff so that the system can operate longer hours. Advantage CVO, now NorPass, has been expanded to cover all fifteen weigh stations in Kentucky. Systems have been expanded to include the Road Weather Information Stations (RWIS), Dynamic Message Signs (DMS), cameras, and roadway sensors. The KYTC has also begun fielding interactive kiosks in our welcome centers, rest areas, and some buildings to provide users with current traffic, travel, weather, tourism, and local information.

On a statewide level, the KYTC has implemented the Condition Acquisition and Reporting System (CARS) as a member of the CARS multi-state consortium. This system provides the ability to gather and share with the traveling public the road and weather conditions along National Highway System routes. The partnership with the Cabinet's District Offices, the Transportation Operations Center in Frankfort, Division of Traffic Operations, Kentucky Vehicle Enforcement, and the Kentucky State Police ensures the highest level of information provided to the traveling public through the use of the common software. The KYTC also has implemented CARS-511 which allows data entered into the CARS database to be translated into a text-to-voice system with Interactive Voice Recognition to provide automated, up-to-date traffic and road information by dialing a three digit telephone number, 511. The KYTC also provides a 511 transfer for live 511 Tourism Information in Southern and Eastern Kentucky.

4. Transportation Enhancement Projects

TEA-21 continued the ISTEA set aside of 10% of a state's annual Surface Transportation Program (STP) funding for "Transportation Enhancement" (TE) projects. The use of TE monies is strictly limited to projects that qualify under at least one of twelve eligible activities and have a surface transportation relationship. Eligible activities may include bikeways or pedestrian facilities, preservation of historic transportation facilities, beautification of the roadway environment, or other such specified improvements. Applications are accepted December 1 through January 31 and project announcements are made by the end of June. As new TE project selections are made, the new projects will be incorporated into the STIP via the revision process.